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मानक

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IS 8064 (2002): Method of Designation of Mechanical and Hydraulic Presses [PGD 4: Metal Forming Machines]



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भारतीय मानक  
यांत्रिक और द्रवचालित प्रेसों की अभिनाम पद्धति  
(दूसरा पुनरीक्षण)

*Indian Standard*

METHOD OF DESIGNATION OF MECHANICAL  
AND HYDRAULIC PRESSES

*(Second Revision)*

ICS 25.120.10

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**BUREAU OF INDIAN STANDARDS**  
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NEW DELHI 110002

## FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Metal-Forming Machines Sectional Committee had been approved by the Basic and Production Engineering Division Council.

This standard was first published in 1976 and revised in 1985. In this second revision besides mechanical presses, method of designation of hydraulic presses have been included and is given in two separate sections, namely,

Section 1 Mechanical presses, and

Section 2 Hydraulic presses.

While preparing this revision, considerable assistance has been derived from the manufacturing practices followed by the manufacturers of mechanical and hydraulic presses in India.

Annexes A and B are for guidance to manufacturers and purchasers for identification of type(s) of presses and these annexes include typical examples for designating the mechanical and hydraulic presses.

*Indian Standard***METHOD OF DESIGNATION OF MECHANICAL  
AND HYDRAULIC PRESSES***(Second Revision)***1 SCOPE**

1.1 This standard describes the method of designation for both mechanical presses and hydraulic presses.

1.2 This method of designation is not directly applicable to transfer presses, friction screw presses, die spotting presses, notching presses, powder compacting presses, wheel fitting presses, briquetting presses, scrap-baling presses and presses built for specific purposes.

1.3 The designation by the method given in this standard does not fully define the press capabilities such as the energy, stroke length, speed, motor capacity, etc. The designation also does not indicate the type of drive.

**SECTION 1 MECHANICAL PRESSES****2 DESIGNATION**

2.1 The designation of the mechanical press shall include the parameters given in 2.2 to 2.7.

**2.2 Type of Frame**

- G — Gap frame
- S — Straight sided frame with or without tie rod construction

**2.3 Lay of Frame**

Lay of frame to be given in designation where applicable as inclinable or fixed inclined.

- I — Inclinable or fixed inclined

**2.4 Drive Mechanism which Imparts Motion to the Main Slide**

- A — Accelerated press drive mechanism
- C — Crank mechanism
- E — Eccentric gear mechanism
- F — Cam and follower mechanism
- K — Knuckle linkage mechanism
- Y — Scotch yoke mechanism

**2.5 Number of Suspensions for Main Slide (Number of Points)**

- 1 — One point suspension
- 2 — Two point suspension
- 3 — Four point suspension

**2.6 Capacity (in tonnes)**

Capacity of the press shall be specified by:

- Single number — Single action press
- Two number — Double action press, the first number being the capacity of the main slide and the second, the capacity of the blank holder slide
- Three number — Triple action press, the first number being the capacity of the main slide, second the capacity of blank holder slide and the third one, the capacity of the third slide

NOTE — In case of double and triple action presses, the numbers shall be separated by plus (+) sign.

**2.7 Dimensions of Bed**

- First number — Left (L) to right (R) dimension of the bed
- Second number — Front (F) to back (B) dimension of the bed

3 Typical examples for method of designation of mechanical presses have been given in Annex A.

**SECTION 2 HYDRAULIC PRESSES****4 DESIGNATION**

4.1 The designation of the hydraulic press shall include the parameters given in 4.2 to 4.4.

**4.2 Type of Frame**

- HG — C-frame/gap frame
- HP — Four pillar type
- HS — Straight sided column type/closed frame

**4.3 Capacity of Press (in tonnes)**

Capacity of press shall be specified in tonnes in number.

**4.4 Dimensions of Bed**

- First number — Left to right dimension of the bed
- Second number — Front to back dimension of the bed

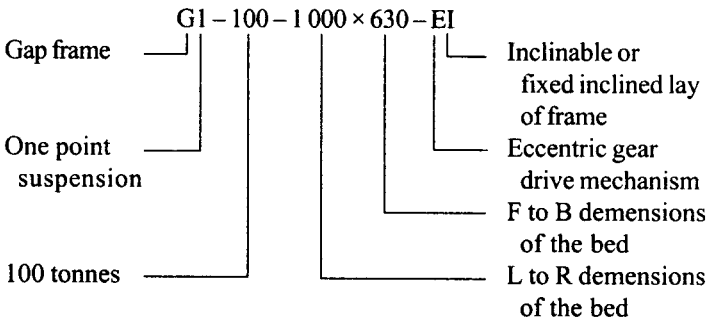
5 Typical examples for method of designation of hydraulic presses have been given in Annex B.

ANNEX A  
(Clause 3)

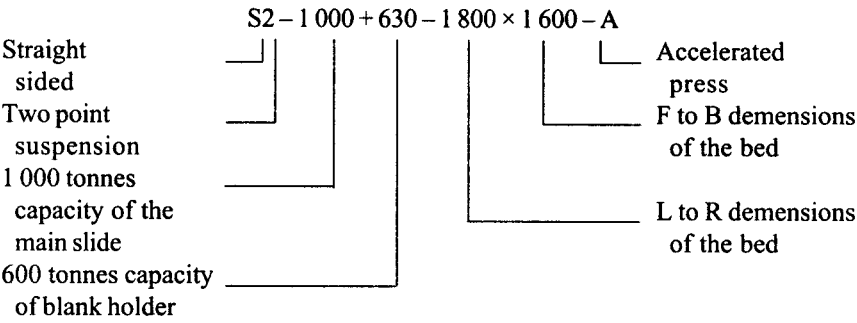
METHOD OF DESIGNATION FOR MECHANICAL PRESSES

Examples:

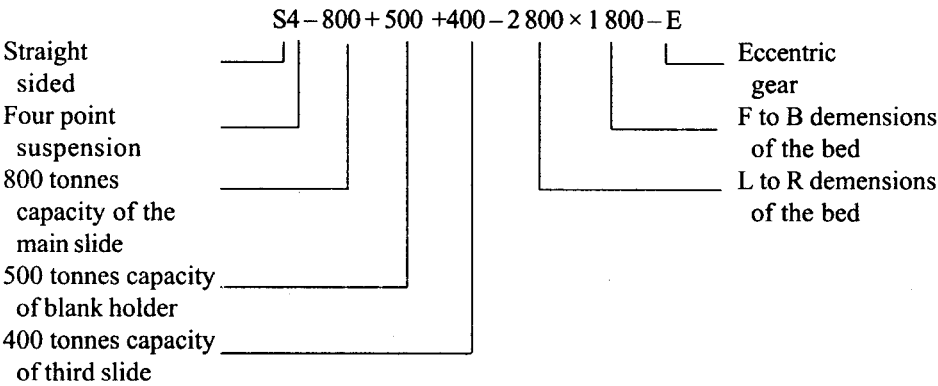
- 1) Gap frame, inclinable lay of frame, eccentric gear drive mechanism, one point suspension, single action 100 tonnes press having bed size: 1 000 (L to R) × 630 (F to B) mm is designated as:



- 2) Straight sided, accelerated press drive mechanism, two point suspension, double action press, 1 000 tonnes capacity of the main slide and 630 tonnes capacity of blank holder having bed size 1 800 mm (L to R) × 1 600 mm (F to B) is designated as:

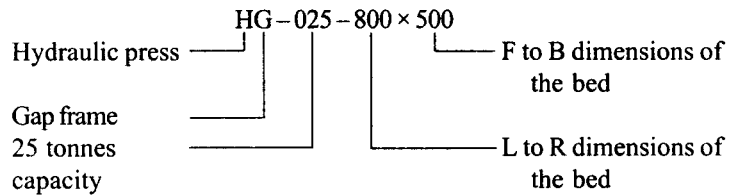


- 3) Straight sided, eccentric gear drive mechanism, four point suspension, triple action press having 800 tonnes capacity of main slide, 500 tonnes capacity of blank holder and 400 tonnes capacity of third slide with a bed size of 2 800 mm (L to R) × 1 800 mm (F to B) mm is designated as:

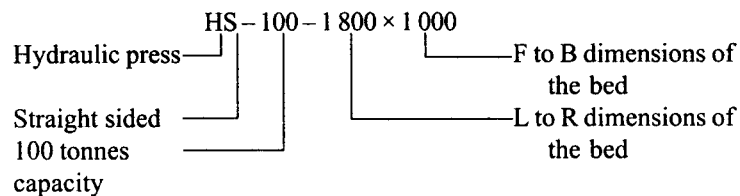


**ANNEX B***(Clause 5)***METHOD OF DESIGNATION OF HYDRAULIC PRESSES***Examples:*

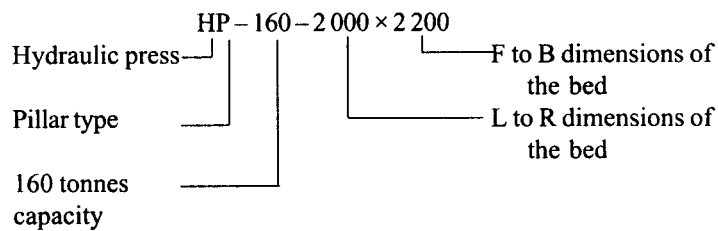
- 1) Gap frame hydraulic press of 25 tonnes capacity bed size 800 mm × 500 mm is designated as:



- 2) Straight sided column type hydraulic press of 100 tonnes capacity with bed size 1 800 mm × 1 000 mm is designated as:



- 3) Four pillar type hydraulic press of 160 tonnes capacity with bed size 2 000 mm × 2 200 mm is designated as:





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**Amendments Issued Since Publication**

Amend No.	Date of Issue	Text Affected

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